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INSTALLATION INSTRUCTIONS FOR 90R/F90R MULLION

Drawing: 106080

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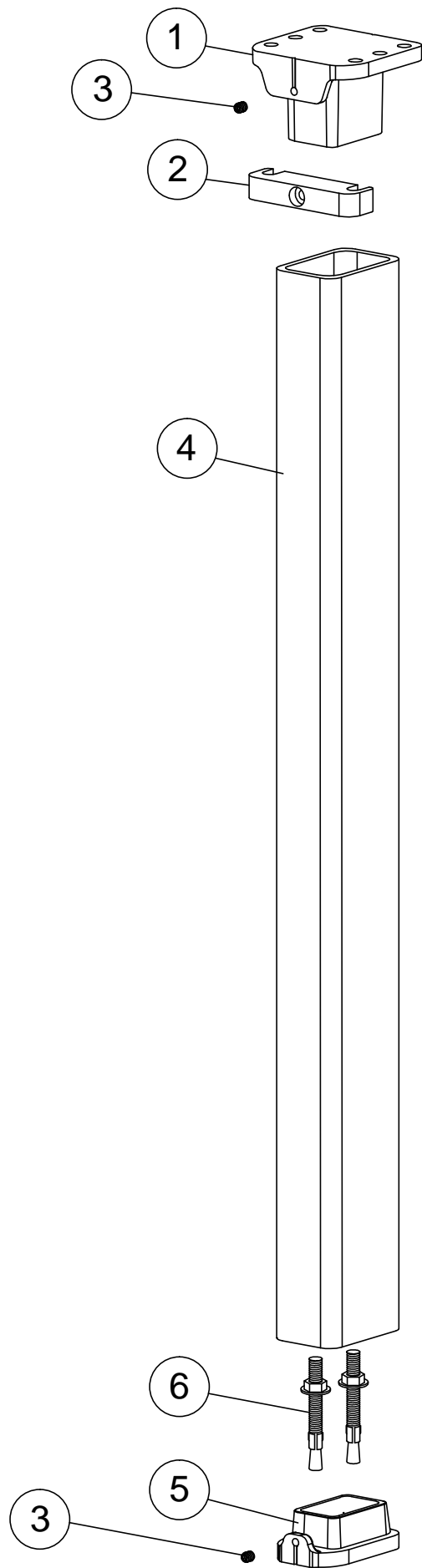
Should you have a Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

**For WARRANTY information,
scan code below or
go to www.detex.com/warranty**



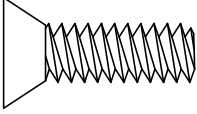
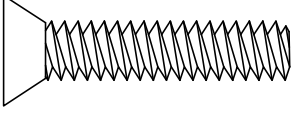
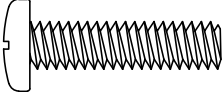
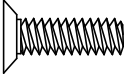
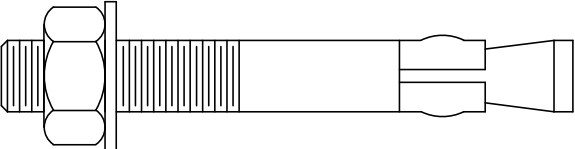
**For device installation videos,
scan code below or
go to www.detex.com/videos**





Item	Part No	Description
1	106732	Top fitting, Mullion, 90R
2	106074	Frame spacer block
3	106087	Set screw, 1/4-20 x 5/16, SS
4	106730-1	Mullion Channel, 90R, 7 foot
	106730-2	Mullion Channel, 90R, 8 foot
5	106731	Base fitting, Mullion, 90R
6	100217	Anchor, Wedge

Hardware List

Screw style	Description	Used on
	5/16-18 X 1" PFHMS P/N 106096	Top fitting
	5/16-18 X 1-1/2" PFHMS P/N 101147	Top fitting and frame spacer block
	1/4-20 X 1" PPHMS P/N 100980	Frame spacer block
	10-24 X 5/8" PFHUMS P/N 100112	Strike hook (If ordered)
	3 /8" x 3" Wedge Anchor P/N 100217	Base Fitting

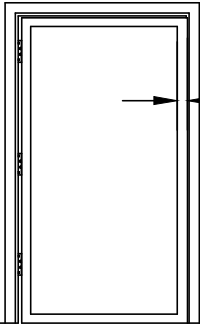
Tools Required:

Power Drill
Level
Hammer
Tape Measure

Safety Glasses
Pencil
Combination Square
Center Punch

Allen Wrench (1/8")
Phillips Screw Drivers (#2 and #3)
Tap Wrenches (1/4-20 & 5/16-18)

!!!CHECK BEFORE STARTING!!!

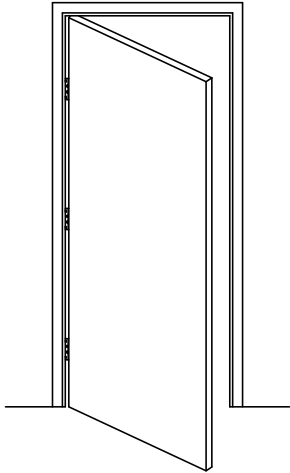
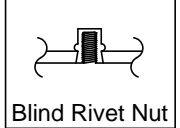
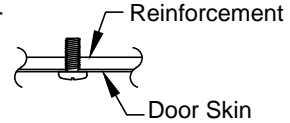


Wide Stile (Surface Strike) 99:
Minimum door stile 4-1/2" (114 mm)
Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.

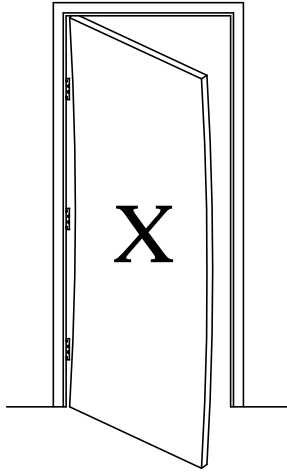
Narrow Stile 98:
Minimum door stile 2" (51mm)

Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.
Unreinforced Doors: Use Sex Nuts and Bolts.
Unreinforced Frames: Use Blind Rivet Nuts (see sketch).
Fasteners for unreinforced openings are not supplied by Detex.

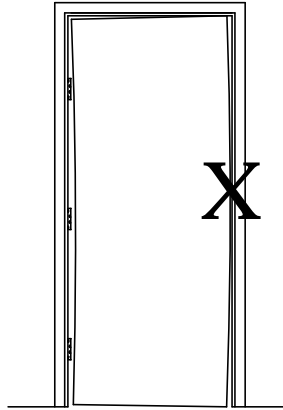
Reinforced door or frame engages at least (3) screw threads.



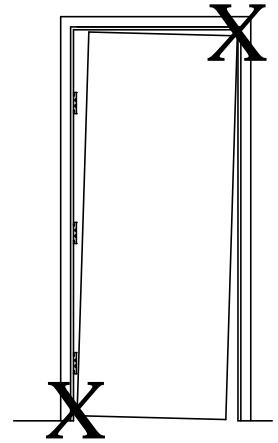
Door Must Swing Freely



Door Must Not be Warped



Door Must Not Bind



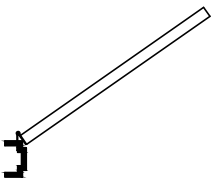
Door Must Not Sag

NOTE: 750mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 36" DEVICE

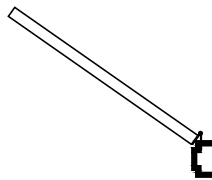
1000mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 48" DEVICE

THE SAFETY FEATURES OF THIS PRODUCT ARE ESSENTIAL TO IT'S COMPLIANCE WITH EN 1125.

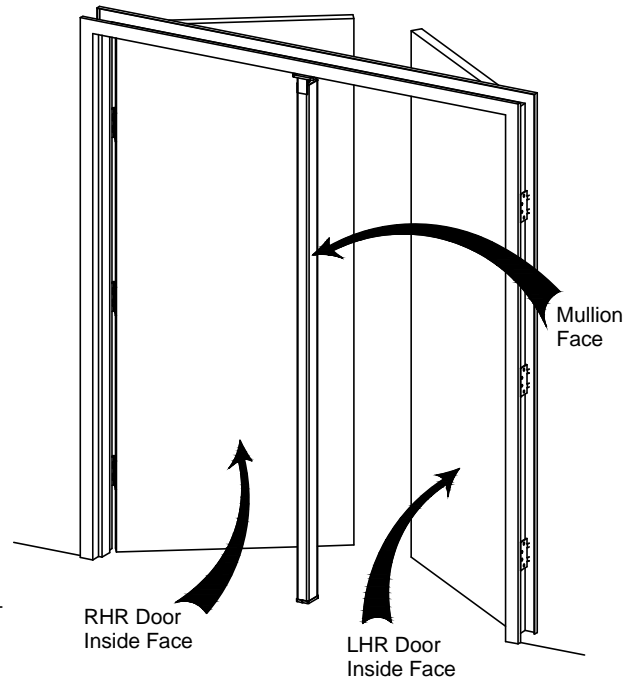
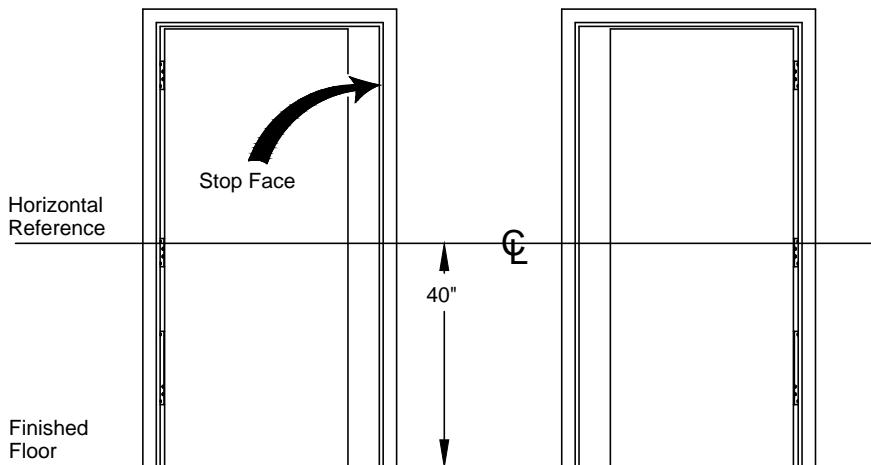
NO MODIFICATION OF ANY KIND, OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS ARE PERMITTED.



RHR Door

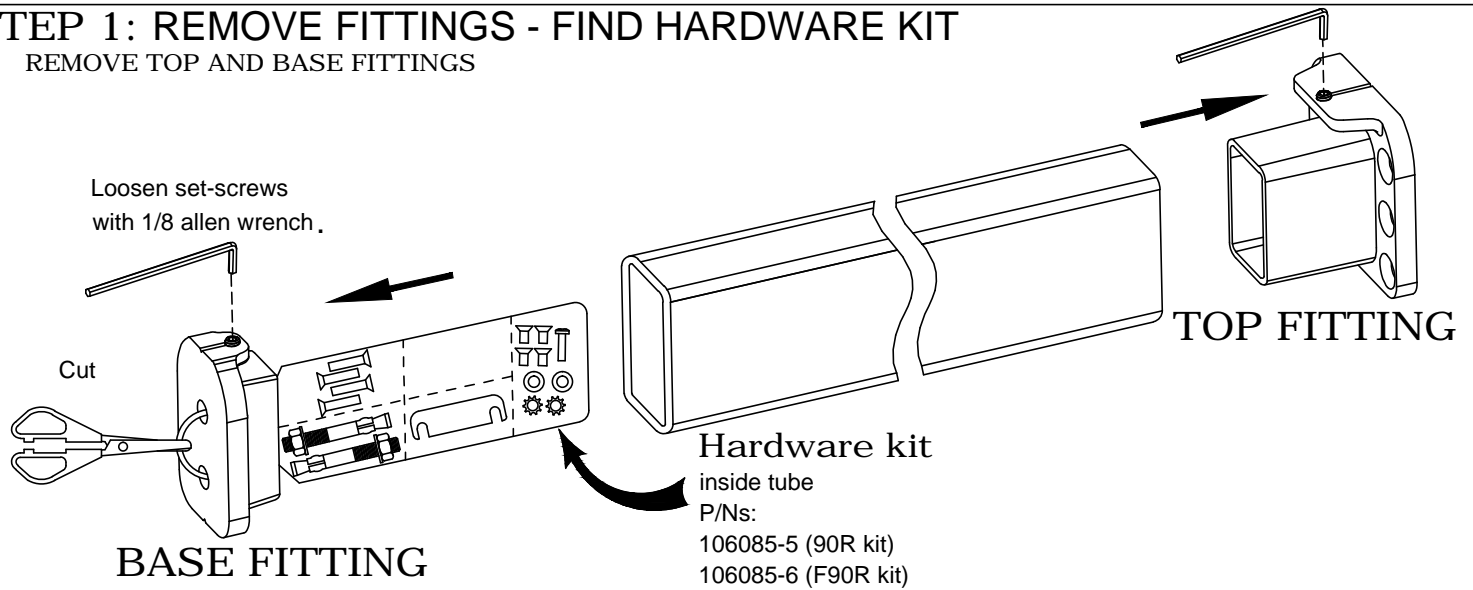


LHR Door



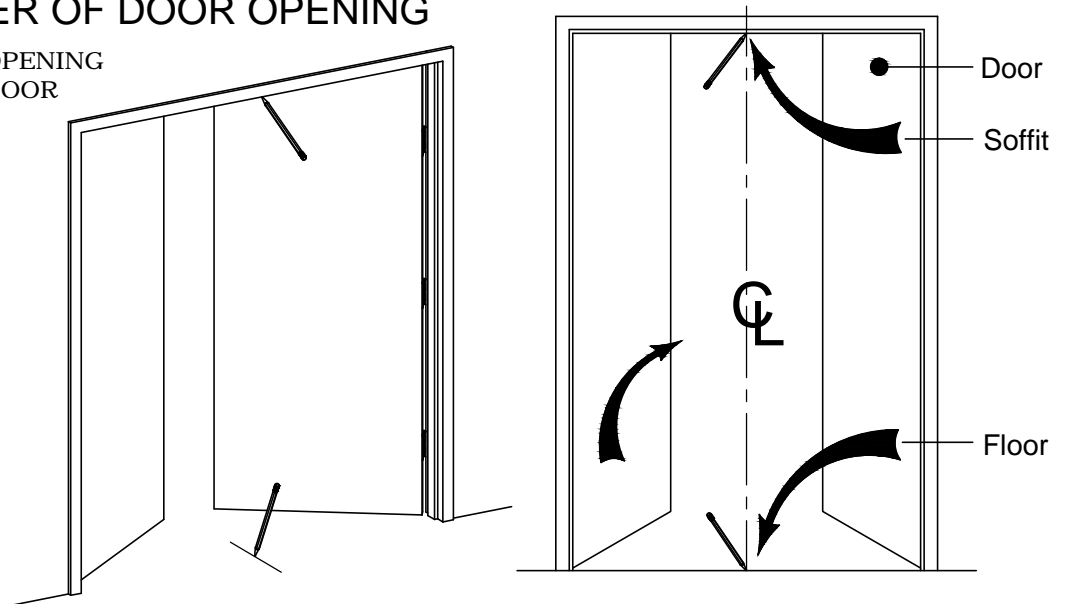
STEP 1: REMOVE FITTINGS - FIND HARDWARE KIT

REMOVE TOP AND BASE FITTINGS



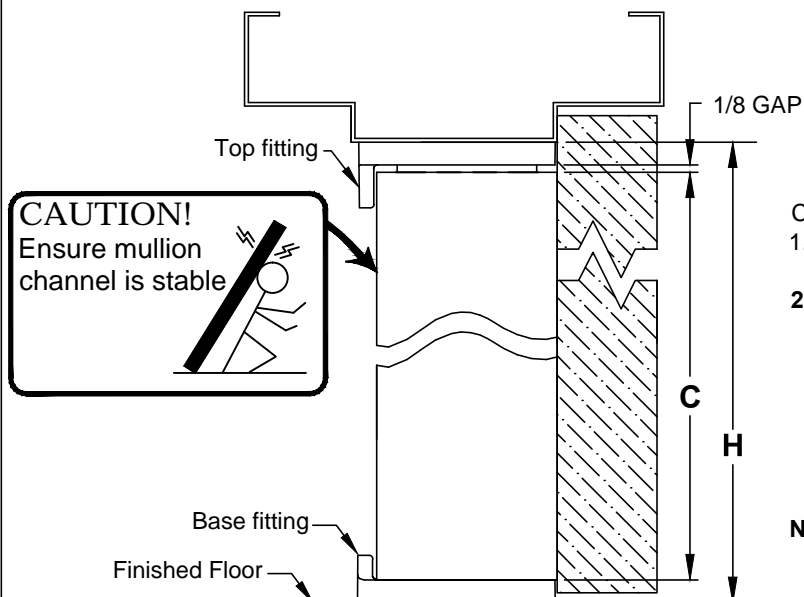
STEP 2: MARK CENTER OF DOOR OPENING

MARK CENTER OF THE DOOR OPENING AT THE SOFFIT AND AT THE FLOOR



STEP 3: TRIAL FIT MULLION & CUT (IF NECESSARY)

If mullion requires cutting, position cut end to the bottom.



Close doors firmly and trial fit the mullion.

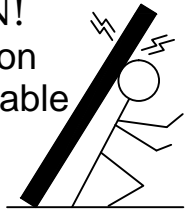
1. Place the top fitting into mullion channel; place the mullion channel into the base fitting, then pivot the top upward into place.
2. **If mullion channel is too long**, measure the distance from the soffit to the floor. Subtract 7/8" from this measurement. Mark and cut the mullion channel to new length.

$$H \text{ (Distance from soffit to floor)} - 7/8" = C \text{ (Cut length of Mullion)}$$

NOTE: If there is a threshold, be sure to CUT the threshold so that the base fitting is resting on the secured non-flammable flooring.

STEP 4: MARK FITTING PERIMETER LOCATIONS

CAUTION!
Ensure mullion
channel is stable

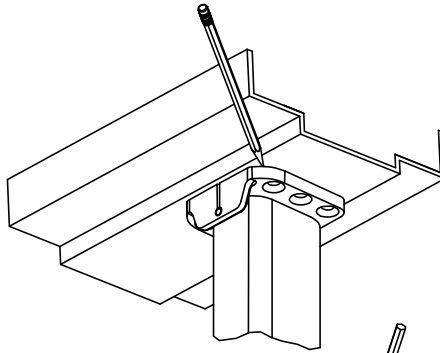
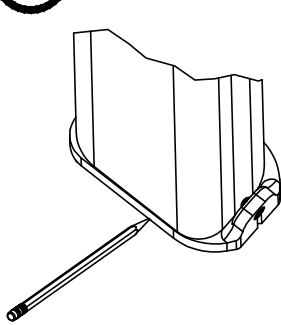


- 4a** Position mullion firmly against closed door.
Align the top fitting with MARK made on soffit.
Align base fitting and base plate with MARK made on floor.
TRIAL fit mullion to achieve desired mullion location.

- 4b** Tighten top & bottom set-screws snug.

1/8 allen wrench

- 4c** DRAW a line around perimeter of base fitting and top fitting.



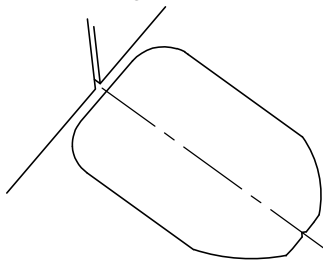
- 4d** REMOVE mullion.
Set mullion safely down.
Be sure to loosen set-screws before removing fittings.

Finished Floor

STEP 5: INSTALL BASE FITTING

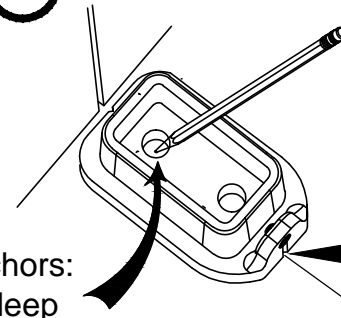
PREP FLOOR FOR BASE FITTING

- 5a** POSITION base fitting over drawn perimeter.
Align notches on fitting with center mark on floor.



Center mark

- 5b** MARK and DRILL floor at two locations.

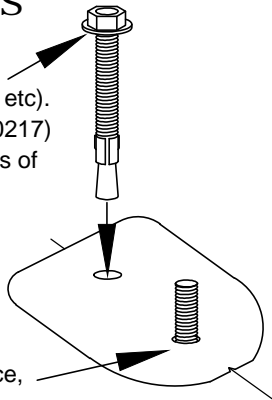


Centering
Notch

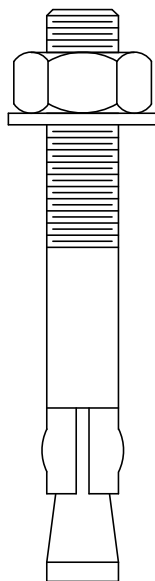
DRILL (2) holes for anchors:
3/8" hole x 1-1/2 to 2" deep

5c INSTALL ANCHORS

Remove any debris from the holes (dust etc). Back off the nuts of the anchors (p/n 100217) until they are just past flush with the ends of the bolts and tap anchors into the holes drilled in previous step.

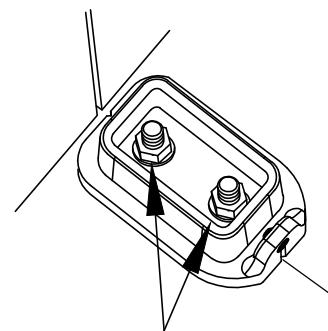


With the anchors tapped in place, remove the nuts & washers.



5d INSTALL BASE FITTING

Place the base fitting over the anchor bolts. Install the washers & nuts. Tighten nuts to engage the wedge anchors into the floor.

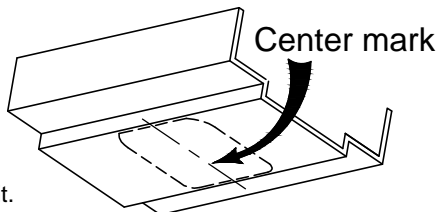


STEP 6: INSTALL TOP FITTING

PREP FRAME FOR TOP FITTING

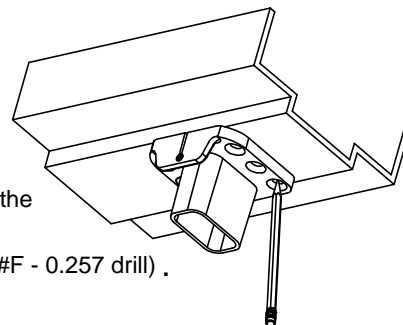
6a

POSITION top fitting over drawn perimeter. Align notches on fitting with center mark on soffit.



6b

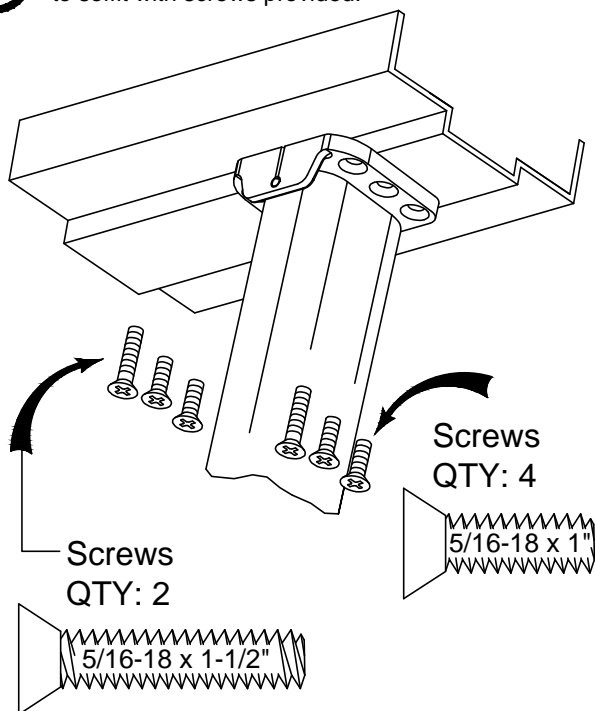
MARK, DRILL, and TAP the soffit at six (6) hole locations. Tap holes with 5/16"-18 tap (#F - 0.257 drill).



INSTALL TOP FITTING

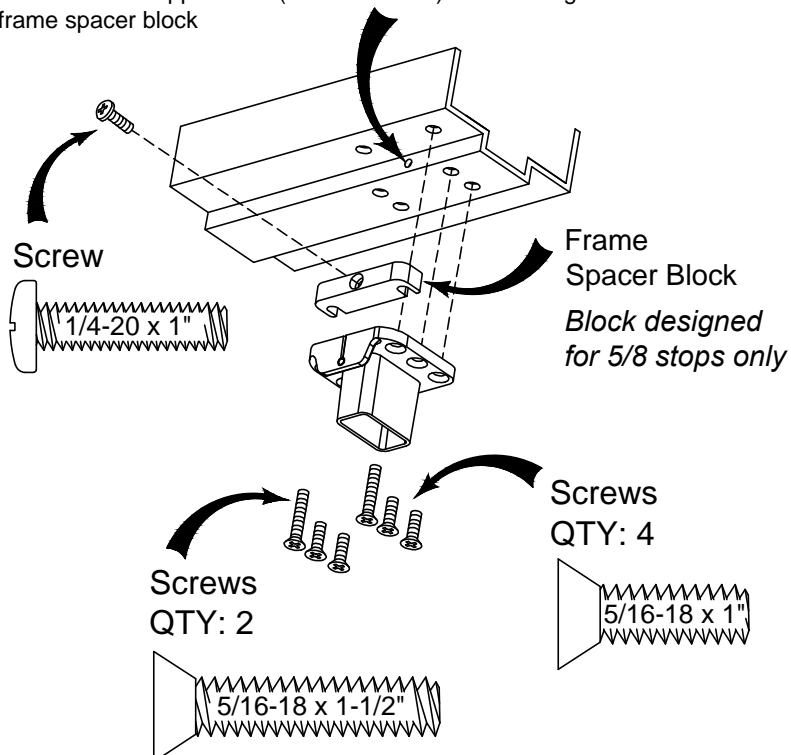
6c

Assemble top fitting and mullion channel to soffit with screws provided.



If top fitting over hangs stop, USE FRAME SPACER BLOCK

Add a 1/4-20 Tapped hole (#7 - 0.201 drill) for installing frame spacer block

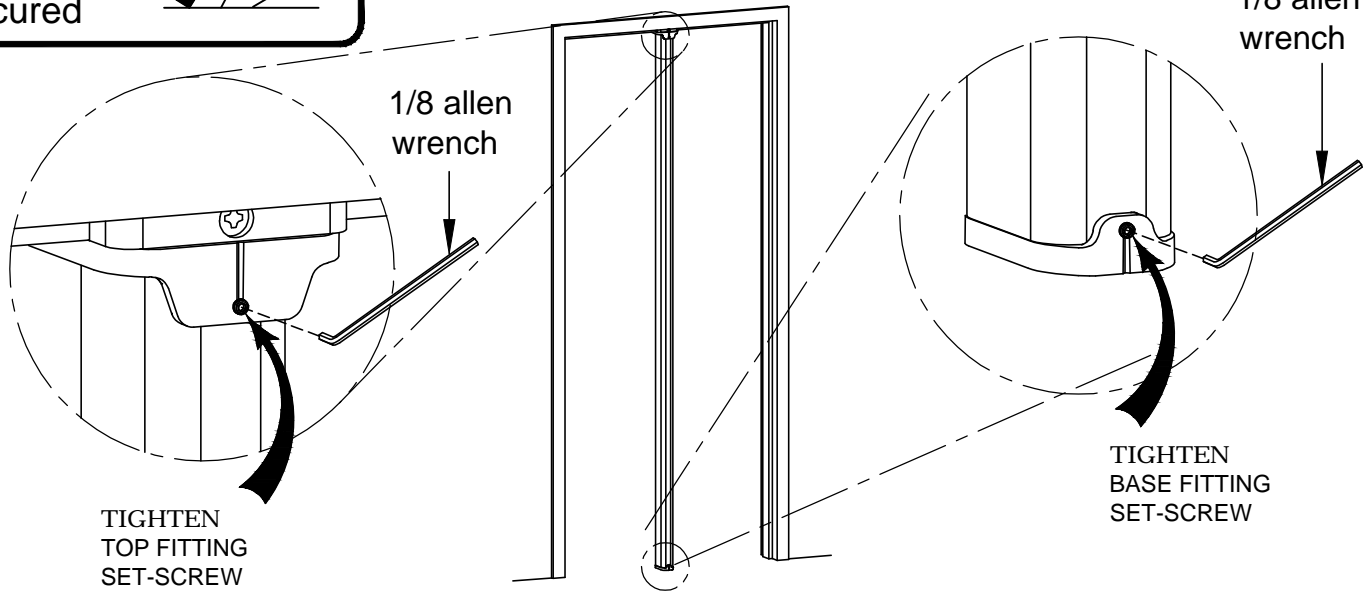


STEP 7: SECURE MULLION

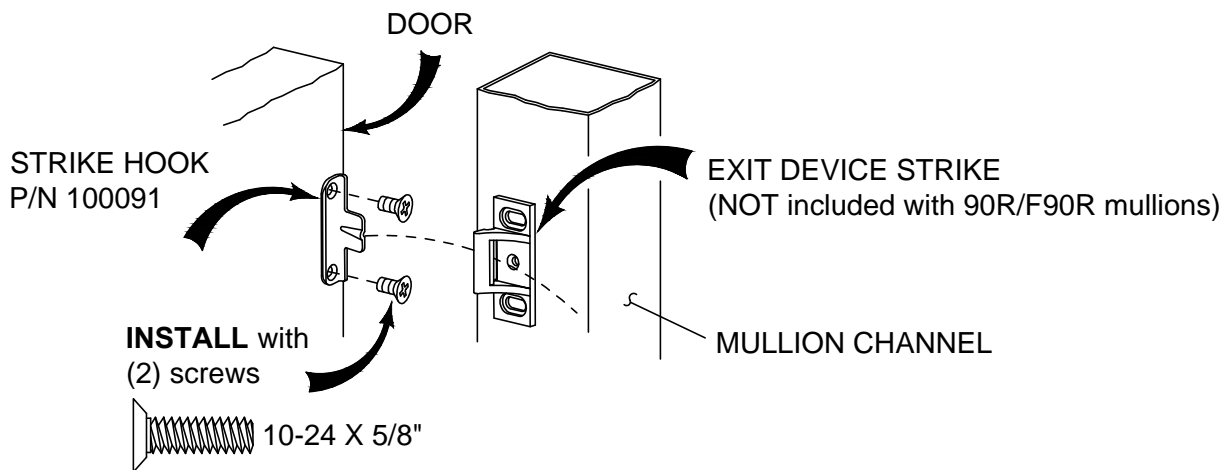
CAUTION!
Ensure mullion
channel is
appropriately
secured



TIGHTEN set-screws to eliminate mullion channel rattle or looseness



STEP 8: INSTALL STRIKE HOOKS (FIRE RATED ONLY, IF REQUIRED)



NOTE: Strike hook is intended for use with Detex Fire Rated exit devices. For all other Fire Rated locking hardware, please reference the manufacturer's instructions to determine installation requirements

1. Attach the strikes to the side of the mullion according to the template provided with the locking device to be used.
2. Attach one strike hook per door leaf according to the template provided with the locking device to be used.
3. Ensure that the strike hook engages the strike without interference to the latching mechanism.
4. Open and close the door. The strike hook should not cause friction or bind during the opening and closing cycles of the door.

REMOVING THE MULLION CHANNEL

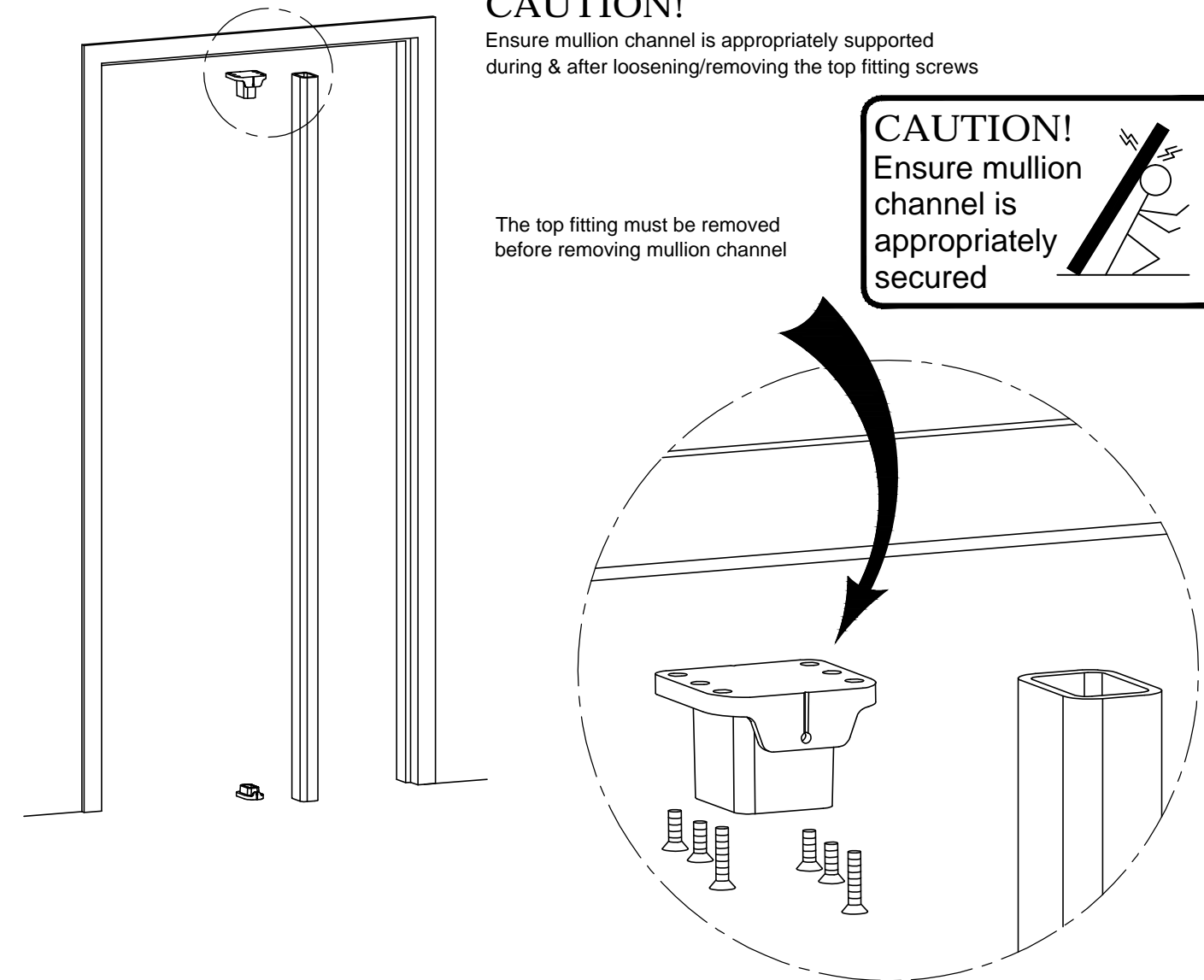
CAUTION!

Ensure mullion channel is appropriately supported during & after loosening/removing the top fitting screws

The top fitting must be removed before removing mullion channel

CAUTION!

Ensure mullion channel is appropriately secured



TROUBLE SHOOTING

1. If Mullion channel is too long:
 - a) See Step 3 for cutting the mullion channel to correct length.
2. Mullion channel rattles after door is closed:
 - a) Tighten set-screws in top and base fittings (See Step 7).
 - b) Verify base and top fittings are secured. Tighten screws as needed.

Customer Service 1-800-729-3839